REMARKS

In view of the above amendments and the following remarks, reconsideration of the present application is respectfully requested.

Claims 1-12 are pending. Claims 13-16 have been withdrawn from consideration. Claims 1-12 have been amended. Support for the amendments to claim 1 is found at paragraph 17, lines 6 through 19, and paragraph 19, lines 43 to 55. No new matter has been introduced by the amendments.

Sequence Rules Compliance

The U.S. Patent and Trademark Office (PTO) has indicated that the application fails to comply with sequence listing requirements as set forth in 37 C.F.R. §§ 1.821-1.825. Applicant has herein (1) provided a computer readable form (CRF) copy of the Sequence Listings in the application; (2) provided a paper copy of the Sequence Listings, attached as Appendix A; and (3) amended the specification in order to incorporate the Sequence Listing numbers associated with each Sequence Listing. Applicant herein requests that the attached Sequence Listings, attached as Appendix A, be entered into the specification.

In addition, applicant hereto states that the content of the paper copy of the Sequence Listings and the CRF of the Sequence Listings are identical, as required by 37 C.F.R. §§ 1.821-1.825. Applicant has included a copy of the Notice to Comply, as requested by the PTO. No new matter has been introduced by this submission.

In view of the foregoing, the application is now in compliance with sequence listing requirements as set forth in 37 C.F.R. §§ 1.821-1.825.

Claim Objections

Claims 4-12 are objected to under 37 CFR 1.75(c) for being in improper multiple dependent form. Claims 3-12 have been amended to place the claims in proper

dependent form. Therefore, the removal of the objection to, and the examination of, claims 4-12 is respectfully requested.

Rejections under 35 U.S.C. § 112

Claim 1 has been rejected under 35 U.S.C. § 112, 2nd paragraph, for failing to particularly point out and distinctly claim the subject matter of the invention. In view of the clarifying amendment to Claim 1, the removal of this rejection is respectfully requested.

Claims 1 and 3 have been rejected under 35 U.S.C. 112, 2nd paragraph, for indefiniteness. Claim 1 has been amended to recite "...the molecules optionally containing non-specific amplification products." Therefore, it is clear that it is the amplification product that is being referred to in claim 1.

Claim 3 has been amended to remove the phrase "such as a", thereby rendering the claim clear and definite.

In view of the clarifying amendments to claims 1 and 3, removal of the rejection of claims 1 and 3 for indefiniteness is respectfully requested.

Rejections under 35 U.S.C. § 102(b)

Claims 1-3 have been rejected under 35 USC §102(b) as anticipated by Rady et al., "Type-specific Primer-mediated Direct Sequencing of Consensus Primer-generated PCR Amplicons of Human Papilloma Viruses; A New Approach for the Simultaneous Detection of Multiple Viral Type Infections" J. of Virol. Methods 53:245-254 (1995) (Rady).

Rady discloses a method of detecting human papillomavirus (HPV) types by "Direct sequencing of the amplified and purified target HPV-DNA fragments...carried out by using consensus primers MY11, MY09 and GP1-2...and type-specific HPV primers as sequencing primers ..." As indicated by Table I, and as shown in Figures 2

and 3 of Rady, a single type-specific primer pair for HPV-6, 11, 16, 18 and 33 is used in separate individual sequencing reactions.

In contrast, the method of the present invention consists of a single sequencing reaction used to examine a single sample, using a "...mixed pool of at least two sequencing oligonucleotide primers whereby each primer is designed for being specific for one type or species or group or target..." as sequencing primers. Therefore, the present invention provides a method for genotyping, typing, identifying, detecting and sequencing nucleic acid molecules from completely different species of organisms present in a single sample.

Because Rady only discloses a method for detecting HPV sub-types, i.e., HPV-6, 11, 16, 18 and 33, Rady does not teach or suggest a method for genotyping, typing, identifying, detecting and sequencing a range of samples, including those from different species, as presently claimed.

Indeed, Rady actually teaches away from the present invention since Rady employs multiple sequencing reactions using single type-specific HPV primers, while the present invention employs a single sequencing reaction using a plurality of type-, species-, group-, and/or target-specific primers for examining a single sample of nucleic acid molecules.

Since Rady neither teaches nor suggests employing a mixed pool of oligonucleotide primers for genotyping, typing, identification, detection and sequencing nucleic acid molecules from a range of different types of samples, Rady does not anticipate claims 1-3 of the present invention. Therefore, the rejection of claim 1, and claims 2 and 3 dependent thereon, as anticipated by Rady, is improper and should be withdrawn.

Conclusion

Since all claims are in a condition for allowance, the issuance of a Notice of Allowability is respectfully requested. Should the examiner have any questions or concerns, the Examiner is invited to call the undersigned attorney of record.

Respectfully submitted,

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